Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims

1. (Currently amended) A microparticle composition comprising nanomagnetic particles and a matrix, wherein the nanomagnetic particles are distributed within the matrix and wherein the composition has ~~at least one of the following properties: (a)~~ a VAR of at least about 1 Watts/ cm^3 under alternating magnetic field conditions suitable for use in a patient; [[(b)]] and a density of about 2.7 or less~~; or (c) a size range of about 100 nm to about 200 microns~~.

2. (Previously presented) A microparticle composition according to claim 1, wherein less than about 40% of the volumetric loading of the microparticle composition is magnetic nanoparticles.

3. (Previously presented) A microparticle composition according to claim 2, wherein the volumetric loading of nanomagnetic particles is less than 30% of the microparticle composition.

4. (Previously presented) A microparticle composition according to claim 2, wherein the volumetric loading of nanomagnetic particles is less than 20% of the microparticle composition.

5-8. (Cancelled)

9. (Currently amended) A microparticle composition ~~according to claim 1~~ comprising nanomagnetic particles and a matrix, wherein the nanomagnetic particles are distributed within the matrix and wherein the composition has a VAR of at least about 1 Watts/cm^3 under alternating magnetic field conditions suitable for use in a patient; and a density of about 2.7 or less, wherein the microparticles within the composition have a size of about ~~25 nm~~ 10 microns to about [[45]] 50 microns.

10. (Previously presented) A microparticle composition according to claim 1, wherein composition has a VAR of about 10 Watts/ cm^3 under alternating magnetic field conditions suitable for use in a patient.

11. (Previously presented) A micro particle composition according to claim 1 wherein the alternating magnetic field is operated at a frequency in the range of about 50-300 kHz and field strength of about 60-120 Oe.

12. (Previously presented) A microparticle composition according to claim 1 wherein the alternating magnetic field is operated at a frequency in the range of about 100-200 kHz and field strength of about 60 Oe.

13. (Original) A microparticle composition according to claim 11 wherein the alternating magnetic field is operated at a frequency in the range of about 100 kHz and field strength of about 90 Oe.

14. (Previously presented) A microparticle composition according to claim 1 wherein the nanomagnetic particles distributed within the micro particles are superparamagnetic particles.

15. (Currently amended) A microparticle composition according to claim 14 wherein the superparamagnetic particles are either: (a) ferrites of general formula ~~MO.Fe203~~ $MO.Fe_2O_3$ where M is a bivalent metal such as Fe, Co, Ni, Mn, Be, Mg, Ca, Ba, Sr, Cu, Zn, Pt or mixtures thereof, or (b) magnetoplumbite type oxides of the general formula ~~MO.6Fe203~~ $MO.{}_6Fe_2O_3$ where M is a large bivalent ion, ~~metalle~~ metallic iron, cobalt or nickel.

16. (Original) A microparticle composition according to claim 15 wherein the superparamagnetic particles are free Fe, Ni, Cr or Co; oxides of Fe, Ni, Cr or Co; or mixtures of Fe, Ni, Cr or Co.

17. (Currently amended) A microparticle composition according to claim 15 wherein the superparamagnetic particles are prepared from iron oxide such as magnetite (~~Fe304~~Fe_3O_4) or maghemite (~~γ-Fe203~~γ-Fe_2O_3) and the superparamagnetic particles have a size of less than 45 nm.

18. (Original) A microparticle composition according to claim 16 wherein the superparamagnetic particles are maghemite nanoparticles.

19. (Previously presented) A microparticle composition according to claim 14 wherein the superparamagnetic particles have a size of between 1 nm and 40nm.

20. (Previously presented) A microparticle composition according to claim 1, wherein the composition is prepared from materials suitable for use in a patient and the particles when delivered to a patient are placed in an alternating magnetic field and are capable of heating tissue in said patient.

21. (Previously presented) A microparticle composition according to claim 1 wherein the matrix in which the nanoparticles are distributed is a polymer matrix.

22. (Original) A microparticle composition according claim 21 wherein the polymer matrix is suitable for use in human.

23 - 24. (Cancelled)

25. (Previously presented) A micro particle composition according to claim 1 wherein the micro particles in the composition are adapted for site specific delivery to or accumulation within a tissue in a patient.

26 - 27. (Cancelled)

28. (Previously presented) A method for heating a target site in a patient including the steps of:

(i) administering a microparticle composition according to claim 22 to a target site in a patient; and

(ii) exposing the target site to an alternating magnetic field, of a clinically acceptable frequency and strength, wherein the combination of the alternating magnetic field with the micro particle composition induces heat within the target site.

29. (Original) The method according to claim 28 wherein the microparticles are of a size and density that permits the transport of the microparticle composition to the capillary beds supplying the target site.

30. (Original) The method according to claim 28 wherein the alternating magnetic field is operated at a frequency in the range of about 50-300 kHz and field strength of about 60-120 Oe.

31. (Currently amended) The method according to claim 30 wherein the alternating ~~magentic~~ magnetic field is operated at a frequency of about 100 kHz and a field strength of about 90 Oe.

32. -34. (Cancelled)

35. (New) The microparticle composition according to claim 1 having a size range of about 100 nm to about 200 microns.